DCCUMENT RESUME

ED 036 170 24 EM 007 756

TITLE	DEGREE OF IMPLEMENTATION OF INDIVIDUALLY PRESCRIBED INSTRUCTION. GUIDE FOR INTERPRETATION OF RESULTS; FALL, 1968.
INSTITUTION	RESEARCH FOR BETTER SCHOOLS, INC., PHILADELPHIA, PA.
SPONS AGENCY	OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.
BUREAU NO	BR-6-2867
PUB DATE	68
CONTRACT	OEC-1-7-062867-3053
NOTE	9P.
EDRS PRICE	EDRS PRICE MF-$0.25 HC-$0.55
DESCRIPTORS	*DIAGNOSTIC TEACHING, EDUCATIONAL FACILITIES, *INDIVIDUALIZED INSTRUCTION, INSTRUCTIONAL MATERIALS, *PERFORMANCE TESTS
IDENTIFIERS	INDIVIDUALLY PRESCRIBED INSTRUCTION, IPI

ABSTRACT

THIS GUIDE FOR THE INTERPRETATION OF RESULTS OF INDIVIDUALLY PRESCRIBED INSTRUCTION (IPI), DESIGNED TO ASSESS THE DEGREE OF IMPLEMENTATION OF IPI FOR EACH SCHOOL AND TEACHER, IS COMPOSED OF INQUIRIES TO BE MADE ON THE USE OF DIAGNOSTIC INSTRUMENTS AND THE TEACHER RESOURCES OF MATERIALS AND SETTINGS. (SP)

ED036170

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

DEGREE OF IMPLEMENTATION

OF

INDIVIDUALLY PRESCRIBED INSTRUCTION

GUIDE FOR

INTERPRETATION OF RESULTS

FALL, 1968

Research for Better Schools, Inc.
121 South Broad Street
Philadelphia, Pennsylvania 19107

EM007 756

INTRODUCTION

To assess the degree of implementation of IPI for each teacher and school, questions were designed to assess how well IPI was put into operation and to provide the teachers and schools feedback so that improvements could be made. In order to determine if a teacher or school has been successful in implementing IPI, the strategies and steps for individualizing instruction were restructured in terms of questions. The results included inquiries to be made on the use of diagnostic instruments and the teacher resources of materials and settings. These questions include:

1. Do pupils begin work at points in the continuum consistent with placement test results?

2. Is the unit pretest given for each unit begun?

3. Are prescriptions written in accord with unit pretest results?

4. Are prescriptions different for different pupils working in the same skill?

5. Are Curriculum-Embedded Tests used properly?

6. Are posttests used properly?

For additional reference material for interpreting these results, Teacher in IPI is recommended.

1. Do pupils begin work at points in the continuum consistent with placement test results?

   Since the units are carefully sequenced, the mastery of each unit is <u>generally</u> dependent upon mastery of the preceding unit.

   The placement tests determine the units to be studied and the continuum specifies the sequence of the units to be mastered. Therefore, the student should work in the necessary units in the order in which they are sequenced in the continuum.

   Utilizing the placement information which was sent to Measurement Research Center and prescriptions which were sent to RBS, a comparison was made to determine if the pupils started in the continuum correctly.

2. Is the unit pretest given for each unit begun?

   With the exception of Level A, unit pretests are available and should be administered for <u>all</u> skills. The results are then used to analyze the specific mathematics skills the student has yet to master within a particular unit.

   An error occurs if the pretest is not administered or if a partial pretest is given.

3. Are prescriptions written in accordance with unit pretest results?

   Prescriptions should be written for all skills with pretest scores below mastery (84% or less), unless teacher judgment is indicated. For this question a "prescription" is defined as the assignment of materials, settings, or a CET.

4. Are prescriptions different for different pupils working in the same skill?

In IPI, instructional decisions are choices a teacher makes in forming a unique program of studies for a student. A diagnosis of the learning needs of the pupils and the objectives to be mastered should result in a variety of materials and settings used.

To describe the decisions made for the pupils, the following reports were generated:

Instructional Techniques (IT):

IPI offers a framework within which to individualize instruction and some prepared materials to help in the task. However, since the STS pages are not sufficient for individualizing instruction, the IPI teacher needs to utilize a variety of settings and materials.

Each prescription written consists of a combination of the two types of instructional techniques: settings and materials. A short description of these techniques follows:

SETTINGS

ALONE: if a pupil works in materials, but did not have any of the following settings, he is said to work by himself.

01 Teacher Tutor: A child has been tutored when the teacher aids him in explaining, questioning, creating a worksheet, etc. This does not include the reading of directions.

02 Peer Tutor: Another student assists this student with a particular skill.

03 Small Group Instruction: Two to ten students are brought together for instruction on a particular skill.

04 Large Group Instruction: Eleven or more students are brought together for instruction on a particular skill.

05 Seminar: Large group instruction on more than one skill is the focus of the instruction. An example might be a discussion of the use of time applying all the skills from a particular level.

4. (cont't)

SETTINGS (cont'd)

07 Independent Study: A student is working independently searching for information on a problem. This setting does not refer to a pupil working alone in the Standard Teaching Sequence, but may often be used along with Research (10).

11 Tutor of Others: This student is used to tutor another student. If this student is receiving the tutoring then it should be recorded as 02.

MATERIALS

STS: The pupil worked in one or more pages in the Standard Teaching Sequence.

06 Curriculum Texts: This includes the use of any textbook which is used for the teaching of a particular skill.

08 Film Strips: This would include the use of any film or film strips.

09 Records/Tapes: This would include the use of any records, tapes or other audio devices that are used to teach a particular skill.

10 Research: The pupil uses books and/or other materials to learn a skill or group of skills. This work may go beyond simple mastery to include the use of the skill in problem solving.

12 Manipulative Devices: A child is assigned a manipulative device which aids the teaching of a particular skill.

Variability of Prescriptions:

After analyzing the pretest scores and selecting the first skill needing working, the decision is made regarding the instructional settings and materials which will constitute the "first prescription". If STS pages are prescribed the total number of pages should vary among pupils working on the same and different skills.

To determine this, the following information is included in the report:

4. (cont'd)

a. MEDIAN NUMBER OF PAGES: The number of pages prescribed such that 50% of the pupils were prescribed more pages and 50% of the pupils prescribed fewer pages.

   For example, if the median is 6, it means that half of the prescriptions were for more than 6 pages and half were for less than 6 pages.

b. 25% OF THE CASES ARE _____: 25% of the 1st prescriptions included <u>fewer</u> than this number of pages.

   For example, if 25% of the cases are below 4, it means that 25% of the prescriptions were for less than 4 pages.

c. 25% OF THE CASES ARE ABOVE_____: The number of pages prescribed such that 25% of the first prescriptions included <u>more</u> pages.

   For example, if 25% of the cases are above 9, it means that one-fourth of the first prescriptions were for greater than 9 pages.

Another way to determine the variability of prescriptions is to examine the average number of CETs to mastery. Since all pupils working in a skill complete at least one CET, the average number to mastery should be between one and two. If the average number of CETs is greater, than two, the causes may be:

4. (cont'd)

1. The teacher consistently does not look carefully at workpage scores so that she can predict when the pupils are ready for CETs.

2. The teacher has adopted a pattern of prescribing a few pages and then a test, a few pages and then a test, for all pupils regardless of their pretest scores and her knowledge of their abilities.

3. The teacher assigns CETs before workpages to nearly all pupils and not just to ones with borderline pretest scores or score conflicts. (See explanation of question 5 for definition of score conflicts.)

4. The teacher unnecessarily requires the pupil to master two successive CETs before accepting that the pupil has mastered the skill.

If the average number of CETs is very close to 1.00 and the median number of pages in the 1st prescription is very high (perhaps 8 to 10 or more), this may indicate another problem. In such cases, nearly all the pupils pass the 1st CET, but many of them may be receiving unnecessarily long prescriptions.

5. Are CETs used properly?

To monitor the student's progress as he works on his prescription and moves from skill to skill within a unit, CETs should be administered. This diagnostic instrument has two parts and should be utilized as follows:

Part I: A CET should be given after a child completes work (pages or IT) in a skill. If he does not show mastery on this CET (a score of 85% or less), follow-up work should be assigned and the alternate form of the CET given. Pupils should not be given a second CET if the first is mastered.

A child may be given a CET without a preceding work assignment if his pretest score was on the borderline of mastery. Again this CET should be followed up with work and/or another CET only if it is failed.

Part II: Since this is a limited pretest of the next skill, mastery or lack of mastery adds information for decision making in two ways:

1. If the score on this part conflicts with the pretest score, the pupil's knowledge should be verified by giving the whole CET for that skill. A transfer of information (and sometimes confusion) between skills often results in a disagreement or conflict between the pupil's pretest score on a skill and his corresponding CET Part II score. Such conflicts should be followed up by a prescription of CET Part I. An error occurs when CET Part II causes a conflict and is not followed by CET Part I of the next skill.

2. Since the pupil should be given every opportunity to test out of a skill, the possibility of transfer between skills needs to be recognized. Therefore, for example, if a pupil works on B-Add-3, then skips to B-Add-6, he should take the CET Part II for B-Add-5 as a short pretest for B-Add-6.

6. Are posttests used properly?

To determine mastery of the unit skills after instruction is given, the posttest should be administered. Since posttest scores below mastery (84% or less) indicate a lack of unit mastery, instruction on the deficient skills must be prescribed as a follow-up.